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IMAGERY

ANALYSIS



STAFF

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PHOTOGRAPHIC INTELLIGENCE REPORT

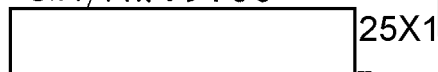
THE REGIONAL PETROLEUM STORAGE
OF CHINA

DECLASS REVIEW by NIMA/DOD



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DATE June 1967

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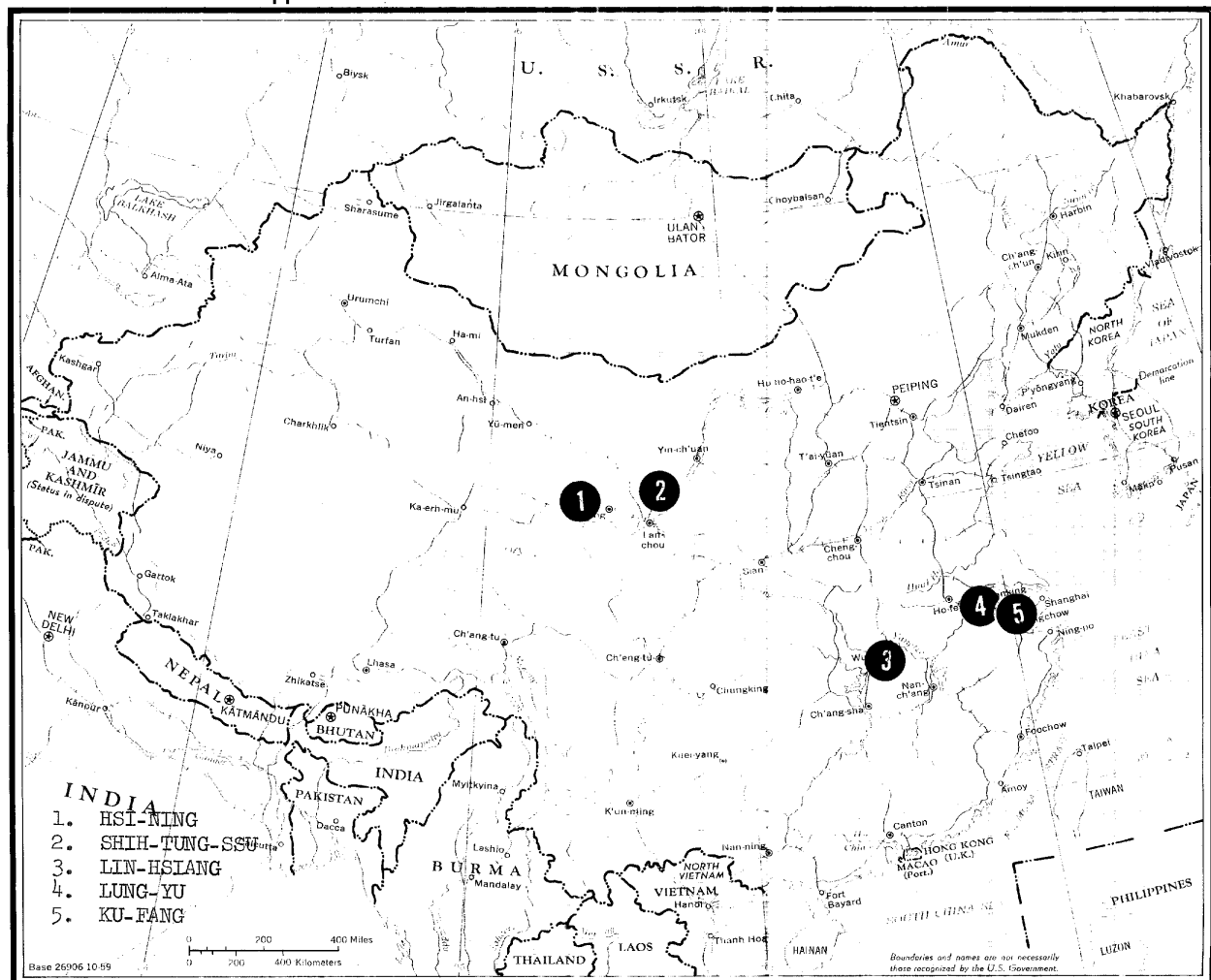
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FIGURE 1

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REGIONAL PETROLEUM STORAGE OF CHINA

JUNE 1967

SUMMARY

This is the fifth report in a continuing series of studies on the regional petroleum storage of China (CIA/PIR's-65133, 65054, 61037, 75105). The facilities in this report appear to be a part of a new generation of storage sites being constructed in China. The construction of four of these new areas began prior to [redacted] and the fifth, Ku-fang, a conventional petroleum storage site, was converted to a semi-buried type between [redacted]. The regional petroleum site at Hsi-ning was the first observed to be served solely by water. This brings to a total of 36 such sites thus far reported.

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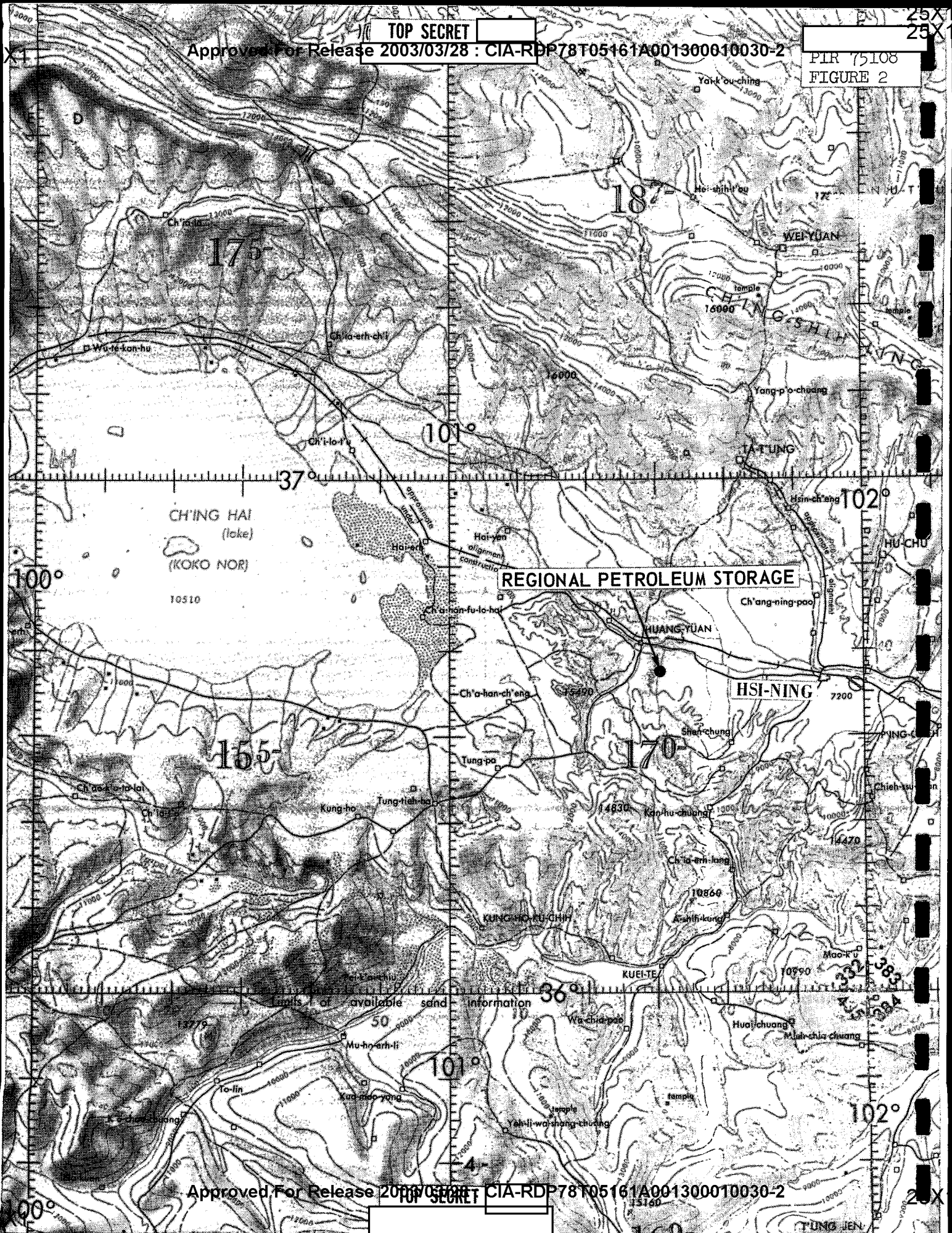
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HSI-NING REGIONAL PETROLEUM STORAGE

This installation is located 20.5 nautical miles (nm) west of Hsi-ning, China at the approximate geographic coordinates, 36-39N 101-21E (Figures 1 and 2). It is neither served by road or rail, but by a tributary of the Hsi-ning Ho (river), thus indicating that petroleum products are to be transported by water. It should be noted that this is the first of this type to be observed.

The facility consists of a support area and semi-buried petroleum storage tanks (Figures 3 and 4).

Photography of [] revealed that there were seven semi-buried tanks in various stages of construction and at least three buildings.

REFERENCES

25X1

Maps and Charts

General Locator Map, China-26906, 10-59 (UNCLASSIFIED)

ACIC. USAF, Operational Navigation Chart, ONE G-8, 1st edition, 6 April 1962, Scale 1:1,000,000 (CONFIDENTIAL)

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25X1

DDI IMAGERY ANALYSIS STAFF

TABLE I

HSI-NING REGIONAL PETROLEUM STORAGE

<u>Item</u>	<u>Dimensions* (Feet)</u>	<u>Area (Square Feet)</u>	
1	Diameter	--	25X1
2	Diameter	--	
3	Diameter	--	
4	Diameter	--	
5	65 by 25		25X1
6	by 30		
7			
8	Diameter	--	25X1
9	Diameter	--	
10	Diameter 80	--	
Total Roof Cover of Support Buildings -			25X1

* All measurements have been made by the NPIC Technical Intelligence Division, and are considered to be accurate within ± 5 feet. Numbers 1 through 4 and 8 through 10 are tanks and 5 through 7 are support buildings.

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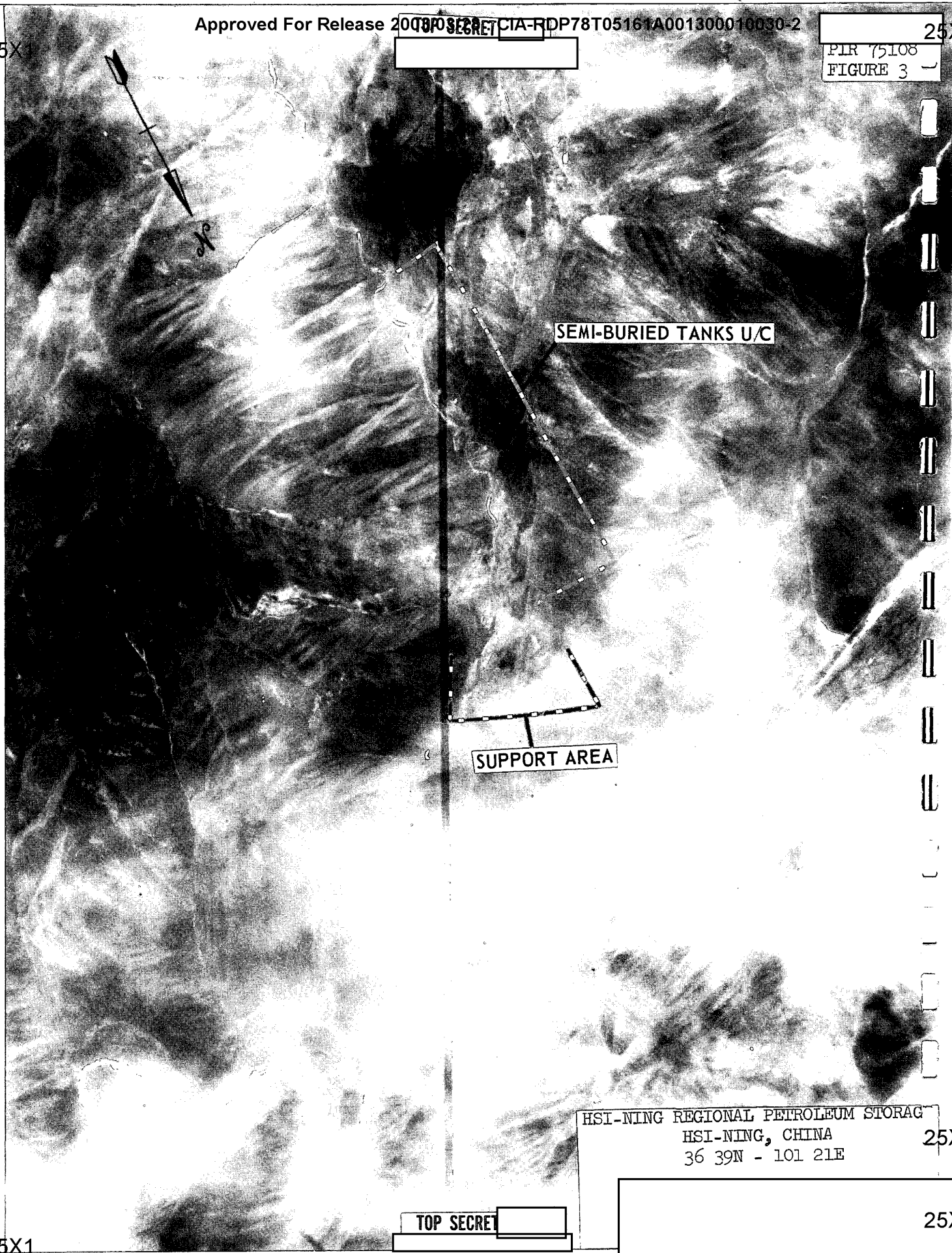
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25X1

25X1

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FIGURE 3

25X1



HSI-NING REGIONAL PETROLEUM STORAGE
HSI-NING, CHINA
36 39N - 101 21E

25X1

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25X1

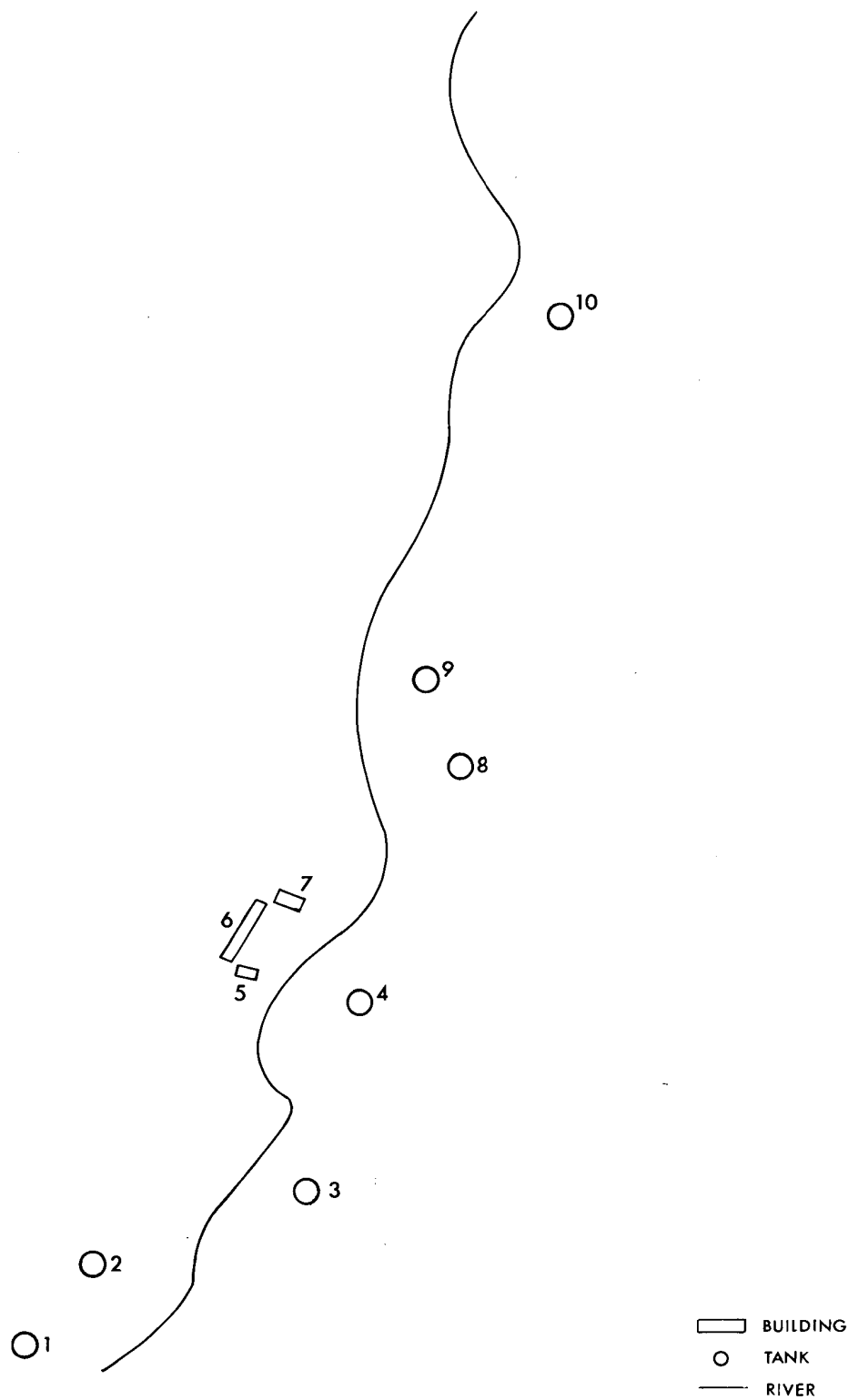
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FIGURE 4

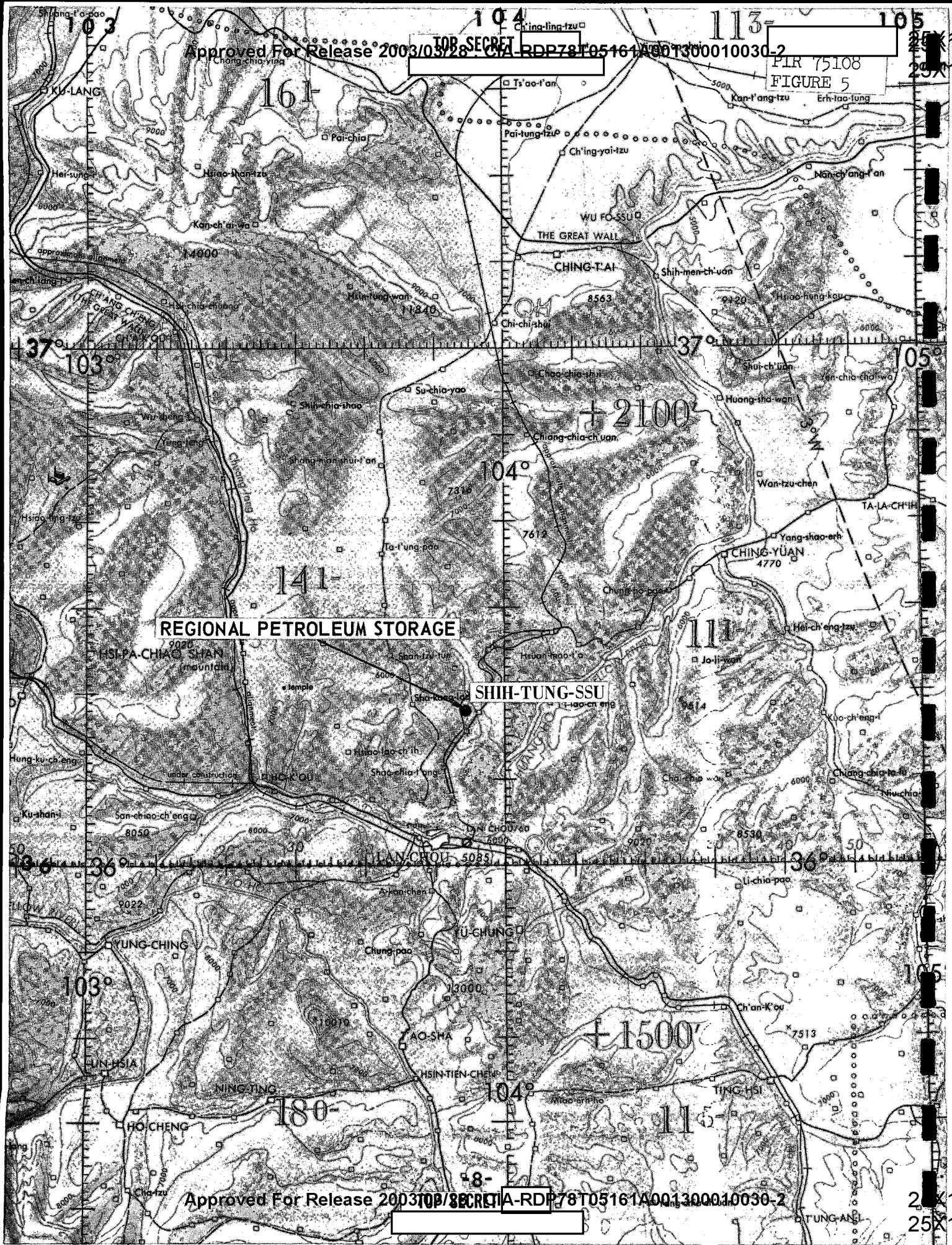
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REGIONAL PETROLEUM STORAGE
HSI-NING, CHINA



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FIGURE 5

REGIONAL PETROLEUM STORAGE

SHIH-TUNG-SSU

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25X1

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25X1

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SHIH-TUNG-SSU REGIONAL PETROLEUM STORAGE

This storage area is located 18 nm north of Lan-chou, China at the approximate geographic coordinates, 36 20N - 103 56E (Figures 1 and 5). The installation is served by a spur of the Lan-chou to Shih-tung-ssu Railroad.

The storage area consists of a support area, a railhead, and semi-buried petroleum storage tanks (Figures 6 and 7).

25X1

Photography of [] showed some support buildings present, but no rail spurs or petroleum storage tanks were noted. Photography of [] showed the installation approximately 50% completed with eight semi-buried tanks in various stages of construction and approximately 44 buildings

25X1

NOTE: The line drawing when compared to the photo enlargement has been rotated approximately 135 degrees clockwise.

REFERENCES

25X1

Maps and Charts

General Locator Map, China - 26906, 10-59 (UNCLASSIFIED)

ACIC, USAF Operational Navigation Chart, ONC-G-9, 2nd edition,
11 March 1963, Scale 1:1,000,000 (CONFIDENTIAL)

25X1

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25X1

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25X1

DDI IMAGERY ANALYSIS STAFF

TABLE II

SHIH-TUNG-SSU REGIONAL PETROLEUM STORAGE

		Dimensions*	Area
		(Feet)	(Square Feet)
	1	Diameter 50	--
25X1	2	Diameter 45	--
	3	Diameter []	--
	4	Diameter 50	--
25X1	5	Diameter 45	--
25X1	6	Diameter 50	--
25X1	7	Diameter 45	--
25X1	8	Diameter []	[] 25X1
25X1	9	45 x 25	
25X1	10	[] x 25	
25X1	11	55 x []	
25X1	12	35 x []	
25X1	13	[]	
25X1	14	[] x 10	
25X1	15	[]	
25X1	16-18	[] x 30	
25X1	19	70 x []	
25X1	20	[] x 10	
25X1	21	[]	
25X1	22	[]	
25X1	23	50 x 20	
25X1	24	[]	
25X1	25	110 x []	
25X1	26-28	[]	
25X1	29	85 x []	
25X1	30	[] x 40	
25X1	31	[]	
25X1	32	[] x 25	
25X1	33-34	[]	
25X1	35	[]	
	36	45 x 25	
25X1	37	45 x []	
	38	45 x 20	
	39	45 x []	
	40	40 x 30	
25X1	41	40 x 20	
	42	40 x []	
25X1	43	40 x 30	
	44	[]	
	45	[]	

25X1

25X1

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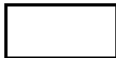
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	<u>Item</u>	<u>Dimensions*</u> <u>(Feet)</u>	<u>Area</u> <u>(Square Feet)</u>	
25X1	46			25X1
	47			
	48			
	49			
	50			
	51	25 x 15		
25X1	52	75 x 		
	Total Roof Cover of Support Buildings-			25X1

*All measurements have been made by the NPIC Technical Intelligence Division, and are considered accurate within ± 10 feet or 5%, whichever is greater. Numbers 1 through 8 are tanks and 9 through 52 are buildings.

25X1

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25X1

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25X1

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FIGURE 6

SEMI-BURIED TANK U/C

SUPPORT AREA

RAILHEAD

SHIH-TUNG-SSU REGIONAL PETROLEUM STORAGE
SHIH-TUNG-SSU, CHINA
36 20N - 103 56E

25X1 25X1

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25X1

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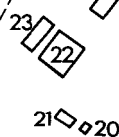
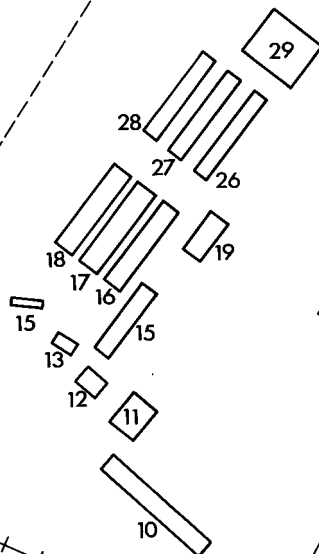
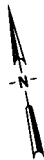
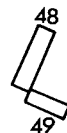
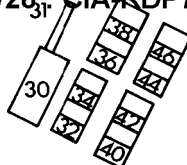
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FIGURE 7

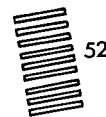
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25X1

31



- BUILDING
- TANK
- ROAD
- RAILROAD
- TRAIL



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25X1

25X1

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REGIONAL PETROLEUM STORAGE
SHIH-TUNG-SSU, CHINA

TOP SECRET

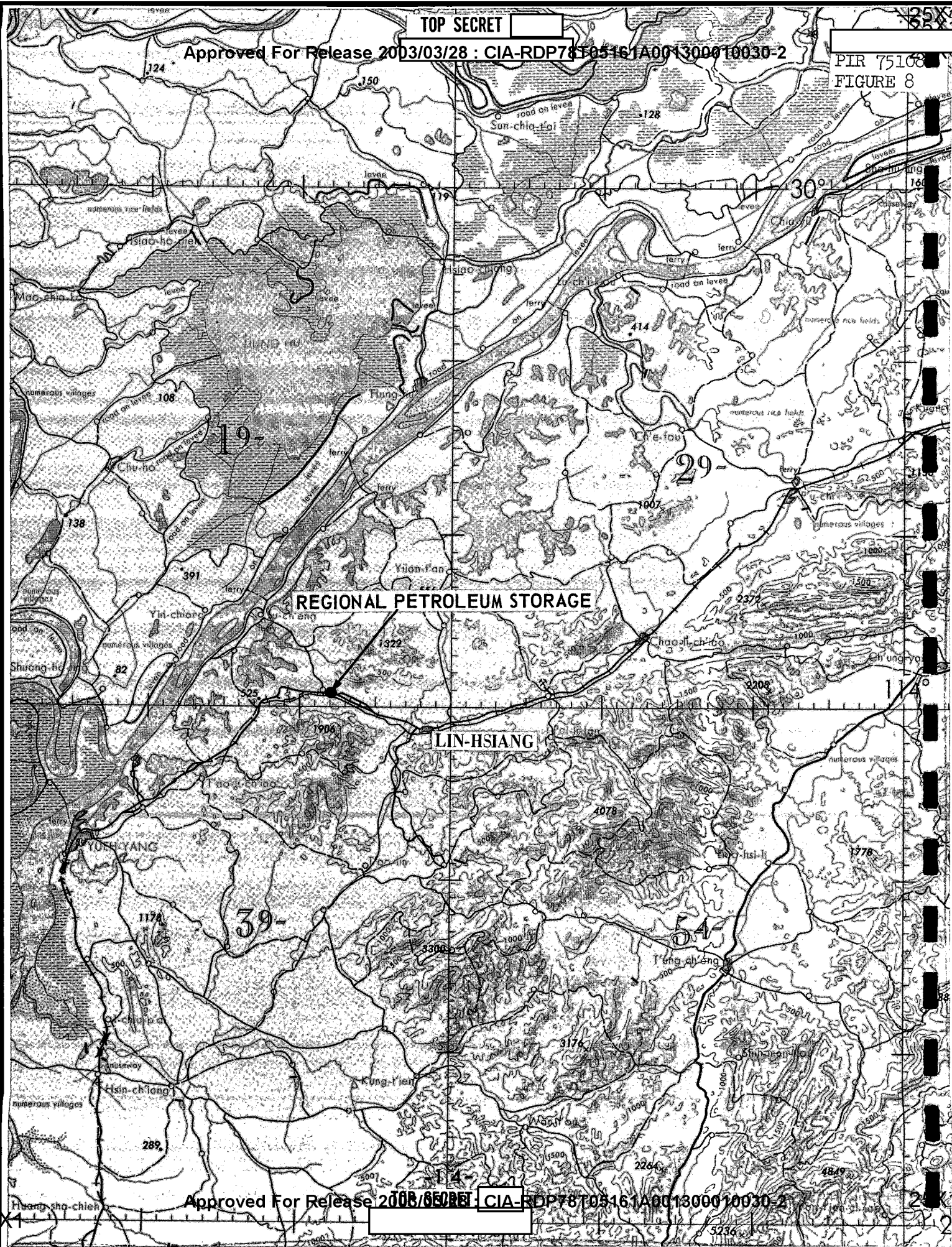
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FIGURE 8

REGIONAL PETROLEUM STORAGE

LIN-HSIANG

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25X1

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25X1
25X1

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LIN-HSIANG REGIONAL PETROLEUM STORAGE

This installation is located five nautical miles northwest of Lin-hsiang, China at the approximate geographic coordinates, 29 31N - 113 22E (Figures 1 and 8). The installation is served by a spur of the Yueh-yang to Lin-hsiang Railroad and by road.

The installation consists of a support area, a railhead, and semi-buried petroleum storage tanks (Figures 9 and 10).

25X1 Work on the storage site was first noted on [] photography dated [] at which time the installation contained 24 semi-buried tanks in various stages of construction and 19 support buildings.

25X1

NOTE: The line drawing when compared to the photo enlargement has been rotated 90 degrees counter clockwise.

REFERENCE

25X1

Maps and Charts

General Locator Map, China - 26906, 10-59, (UNCLASSIFIED)

ACIC, USAF Pilotage Chart, PCH-12A, 1st edition, 18 May 1966,
Scale 1:500,000 (UNCLASSIFIED)

25X1

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25X1

25X1

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TABLE III

LIN-HSIANG REGIONAL PETROLEUM STORAGE

		Dimensions*	Area
		(Feet)	(Square Feet)
25X1	1	Diameter	--
	2	Diameter	--
	3	Diameter	--
	4	Diameter	--
	5	Diameter	--
	6	Diameter 115	--
25X1	7	x 220	25X1
	8	Diameter 105	--
	9	Diameter 90	--
	10	Diameter 65	--
	11	Diameter 50	--
	12	Diameter 80	--
	13	Diameter 105	--
	14	Diameter 65	--
	15	Diameter 85	--
25X1	16	Diameter	--
	17	Diameter 65	--
	18	Diameter 85	--
	19	Diameter 80	--
25X1	20	Diameter	--
	21	Diameter	--
	22	Diameter 40	--
	23	Diameter 105	--
25X1	24	Diameter	--
25X1	25	85 x 25	25X1
25X1	26	60 x 30	
25X1	27	x 25	
25X1	28	65 x 30	
25X1	29		
25X1	30	diameter	
25X1	31		
25X1	32	75 x	
25X1	33	65 x	
25X1	34		
25X1	35-42		
	43	x 25	

Total Roof Cover of Support Buildings - 25X1

25X1

25X1

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25X1

25X1

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*All measurements have been made by the NPIC Technical Intelligence Division, and are considered to be accurate within ± 5 feet or 5% whichever is greater. Numbers 1 through 6, 8 through 24, and 30 are tanks and numbers 7, 25 through 29, and 31 through 43 are support buildings.

25X1

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FIGURE 9

RAILHEAD

SUPPORT AREA

SEMI-BURIED TANKS U/C

LIN-HSLANG REGIONAL PETROLEUM STORAGE

25X1

LIN-HSLANG, CHINA

29 31N - 113 22E

25X1

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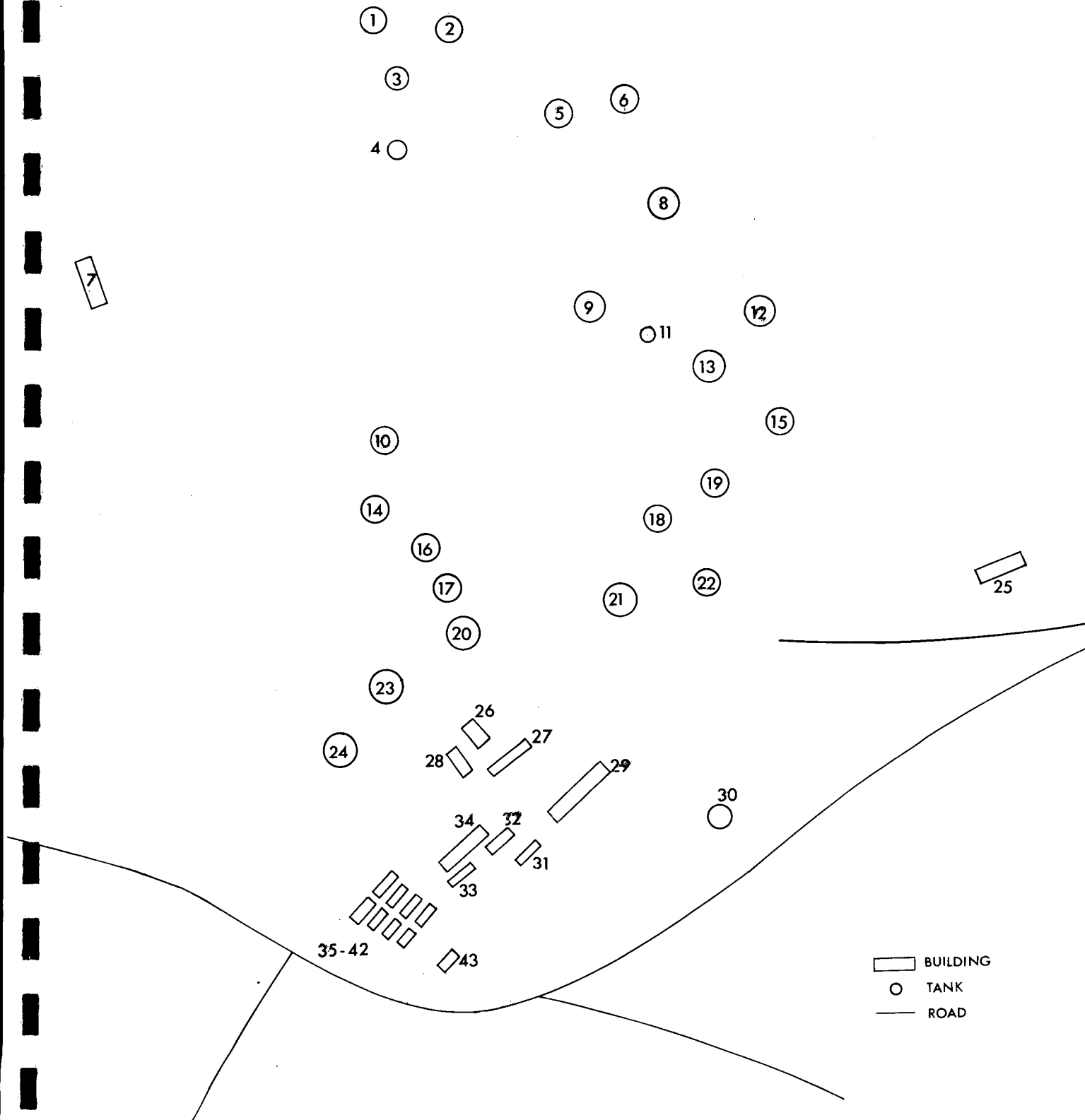
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25X1

25X1

25X1

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FIGURE 10



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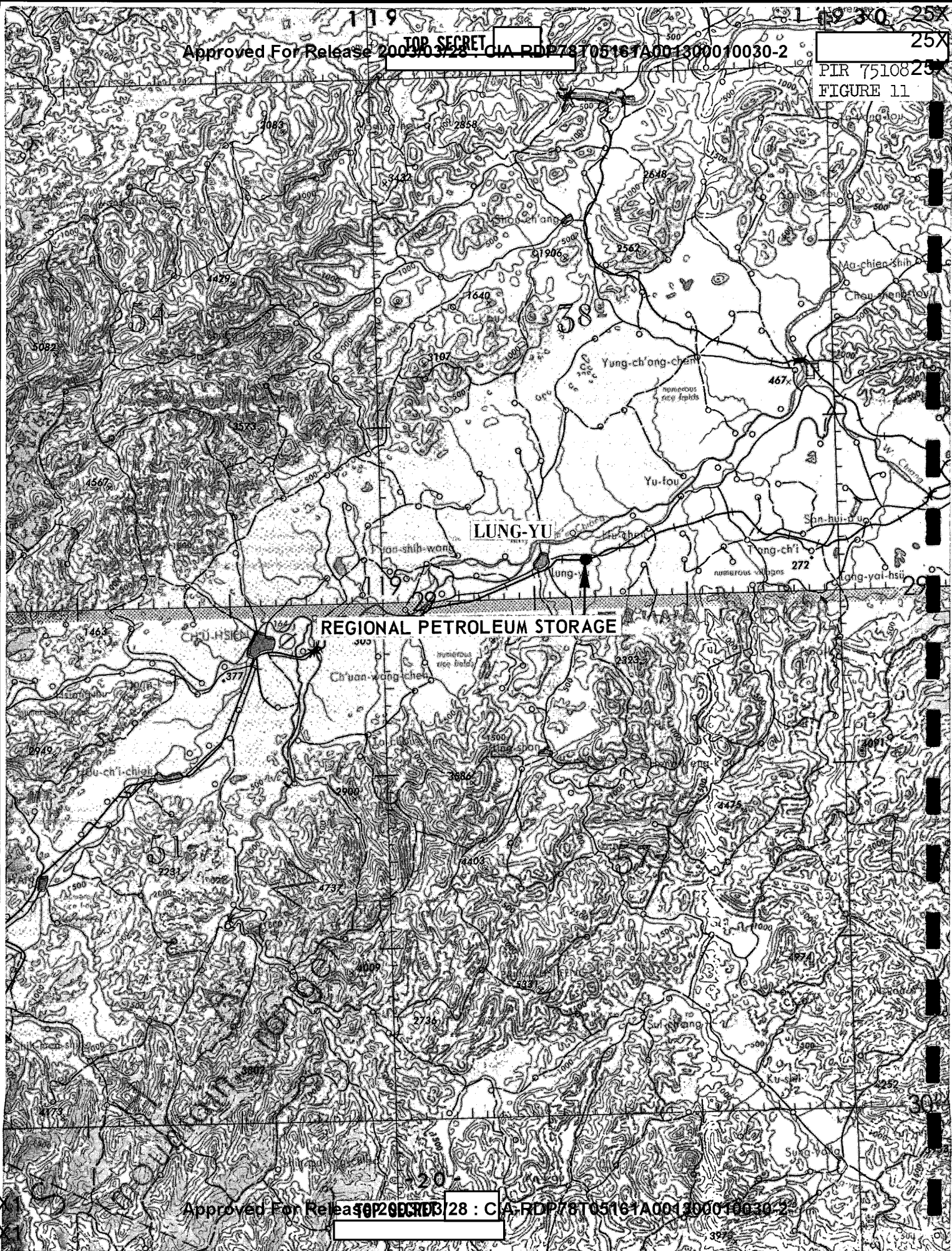
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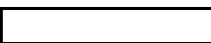
REGIONAL PETROLEUM STORAGE
LIN-HSIANG, CHINA



25X1



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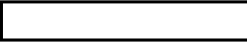
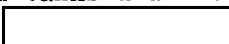
25X1
25X1

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LUNG-YU REGIONAL PETROLEUM STORAGE

This storage area is located two nautical miles east of Lung-yu, China at the approximate geographic coordinates, 29 02N - 119 13E (Figures 1 and 11), and is served by a spur of the Lung-yu to Chin-hua Railroad.

The facility consists of a support area, a railhead, and the semi-buried tanks (Figures 12 and 13).

The installation was about 50% completed by  with six semi-buried tanks under construction and at least five support buildings. Photography of  revealed that construction had not been started.

25X1

25X1

REFERENCES



25X1

Maps and Charts

General Locator Map, China - 26906, 10-59 (UNCLASSIFIED)

ACIC, USAF Pilotage Chart, PCH-12A, 1st edition, 18 May 1966,
Scale 1:500,000 (UNCLASSIFIED)

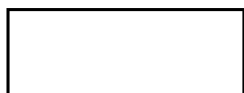
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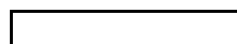
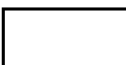


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DDI IMAGERY ANALYSIS STAFF

TABLE IV

LUNG-YU REGIONAL PETROLEUM STORAGE

25X1

25X1

25X1

25X1

25X1

25X1

25X1

Item	Dimensions* (Feet)	Area (Square Feet)
1	20 x	
2	Diameter	
3	Diameter	
4	Diameter	
5	Diameter	
6	x 20	
7		
8	Diameter	
9	Diameter	
10		
11		
12	10 x	

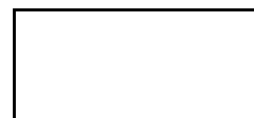
25X1

Total Roof Cover of Support Buildings

25X1

*All measurements have been made by the NPIC Technical Intelligence Division, and are considered to be accurate within ± 5 feet. Numbers 1, 6, 7 and 10 through 12 are support buildings, and numbers 2 through 5 and 8 through 9 are tanks.

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25X1

25X1

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FIGURE 12

SEMI-BURIED TANKS U/C

SUPPORT AREA U/C

RAILHEAD

LUNG-YU REGIONAL PETROLEUM STORAGE

LUNG-YU, CHINA

25X1 29 02N - 119 13E 25X1

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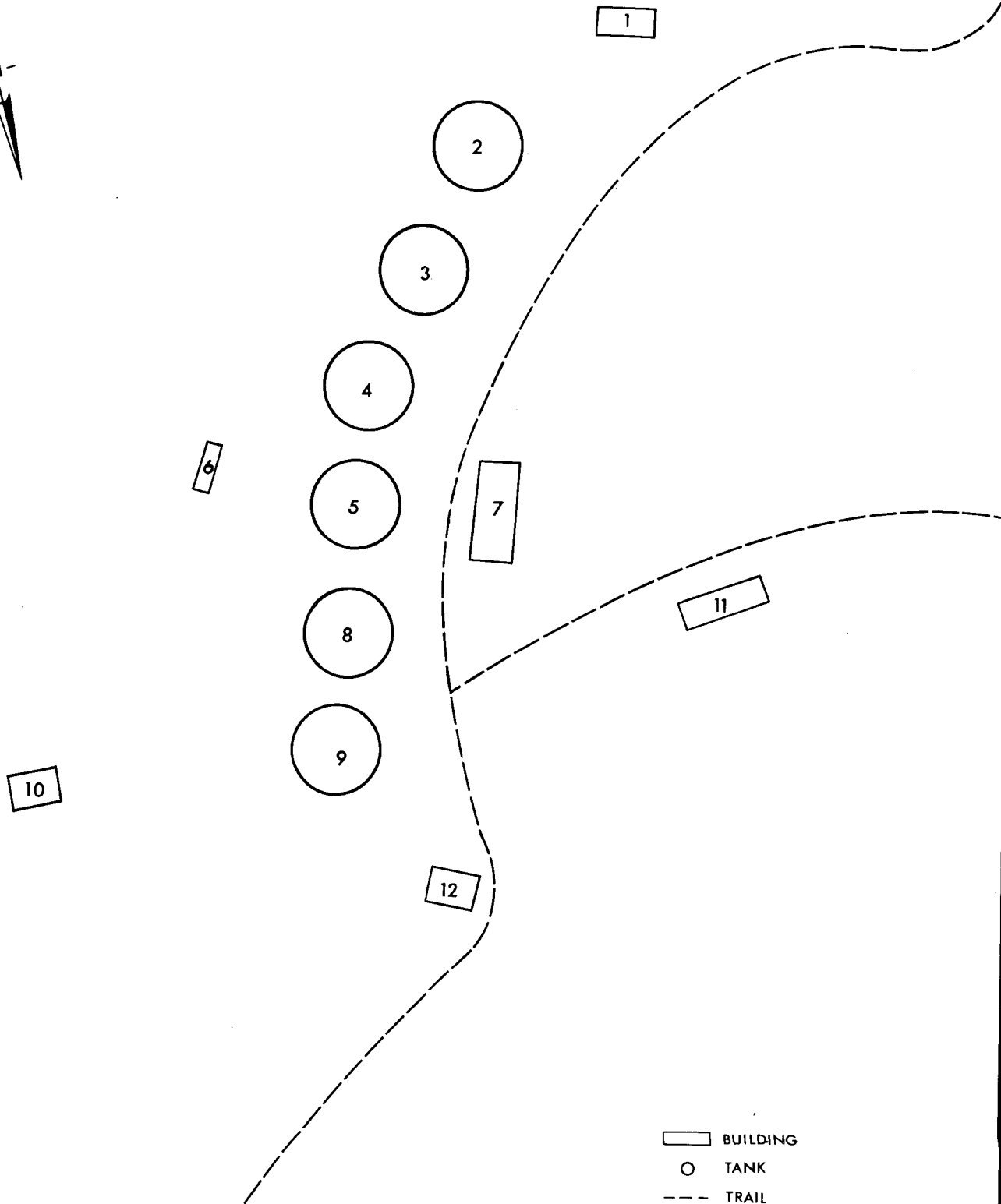
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FIGURE 13

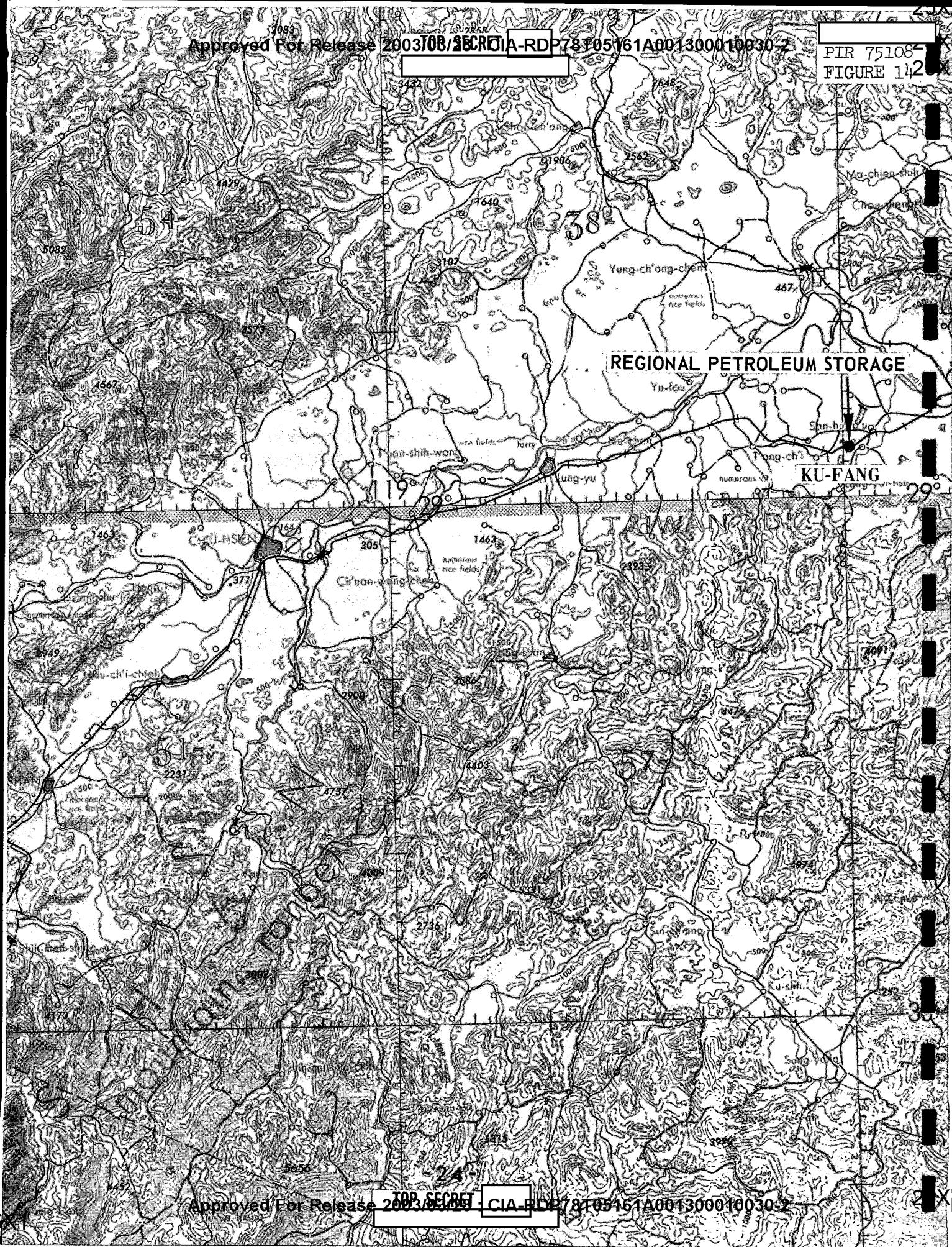


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REGIONAL PETROLEUM STORAGE
LUNG-YU, CHINA



25X1

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KU-FANG REGIONAL PETROLEUM STORAGE

This installation is located seven nautical miles southwest of Chin-hua, China at the approximate geographic coordinates, 29 03N - 119 31E (Figures 1 and 14) and is served by a spur of the Chin-hua to Lung-yu Railroad and by road.

The installation consists of a support area, a railhead, and semi-buried petroleum storage tanks and above ground tanks (Figures 15 and 16).

This installation is of an older type which has been converted to the newer semi-buried type. Originally it consisted only of above ground storage tanks which were typical of older facilities.

25X1

The facility was over 50% completed by [REDACTED] there were 10 support buildings, four above ground vertical tanks, 14 horizontal tanks, and approximately 12 semi-buried tanks.

25X1

REFERENCES

25X1

Maps and Charts

General Locator Map, China - 26906, 10-59 (UNCLASSIFIED)

ACIC, USAF Pilotage Chart, PCH-12A, 1st edition, 18 May 1966,
Scale 1:500,000 (UNCLASSIFIED)

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25X1

25X1

PIR - 75108

DDI IMAGERY ANALYSIS STAFF

TABLE V

KU-FANG REGIONAL PETROLEUM STORAGE

		Dimensions*	Area
		(Feet)	(Square Feet)
25X1	1	10 x 25	--
25X1	2	10 x <input type="text"/>	--
25X1	3	<input type="text"/> x 65	--
25X1	4	<input type="text"/>	--
25X1	5	<input type="text"/>	--
25X1	6	10 x <input type="text"/>	--
25X1	7	<input type="text"/> x 80	--
25X1	8	<input type="text"/> x 35	--
25X1	9	<input type="text"/>	--
25X1	10-11	<input type="text"/> x 140	--
25X1	12	20 x 30	--
25X1	13	<input type="text"/>	--
25X1	14	<input type="text"/> x 30	--
25X1	15	<input type="text"/>	--
25X1	16	<input type="text"/>	--
25X1	17	<input type="text"/> x 20	--
25X1	18	<input type="text"/> x 25	--
25X1	19	<input type="text"/>	--
25X1	20	<input type="text"/> x 20	--
25X1	21	<input type="text"/>	--
	22-23	Diameter <input type="text"/>	--
	24	Diameter <input type="text"/>	--
	25	Diameter <input type="text"/>	--
25X1	26-27	Diameter <input type="text"/>	--
25X1	28	Diameter 40	--
	29	Diameter <input type="text"/>	--
	30	Diameter 60	--
	31	Diameter <input type="text"/>	--
	32	Diameter <input type="text"/>	--
	33	Diameter <input type="text"/>	--
	34	Diameter <input type="text"/>	--
	35	Diameter <input type="text"/>	--
	36	Diameter <input type="text"/>	--
	37	Diameter <input type="text"/>	--

Total Roof Cover of Support Buildings - 25X1

25X1

TOP SECRET

25X1

~~TOP SECRET~~

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25X1
25X1

DDI IMAGERY ANALYSIS STAFF

*All measurements have been made by the NPIC Technical Intelligence Division and are considered to be accurate within ± 5 feet or 5%, whichever is greater. Numbers 1 through 21 are support buildings and 22 through 37 are tanks.

~~TOP SECRET~~

25X1
25X1

TOP SECRET

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FIGURE 15

25X

25X

SUPPORT AREA

RAILHEAD

ABOVE GROUND TANKS

SEMI-BURIED TANKS

KU-FANG REGIONAL PETROLEUM STORAGE
KU-FANG, CHINA
29 03N - 119 30E

28

25X

25X

25X1

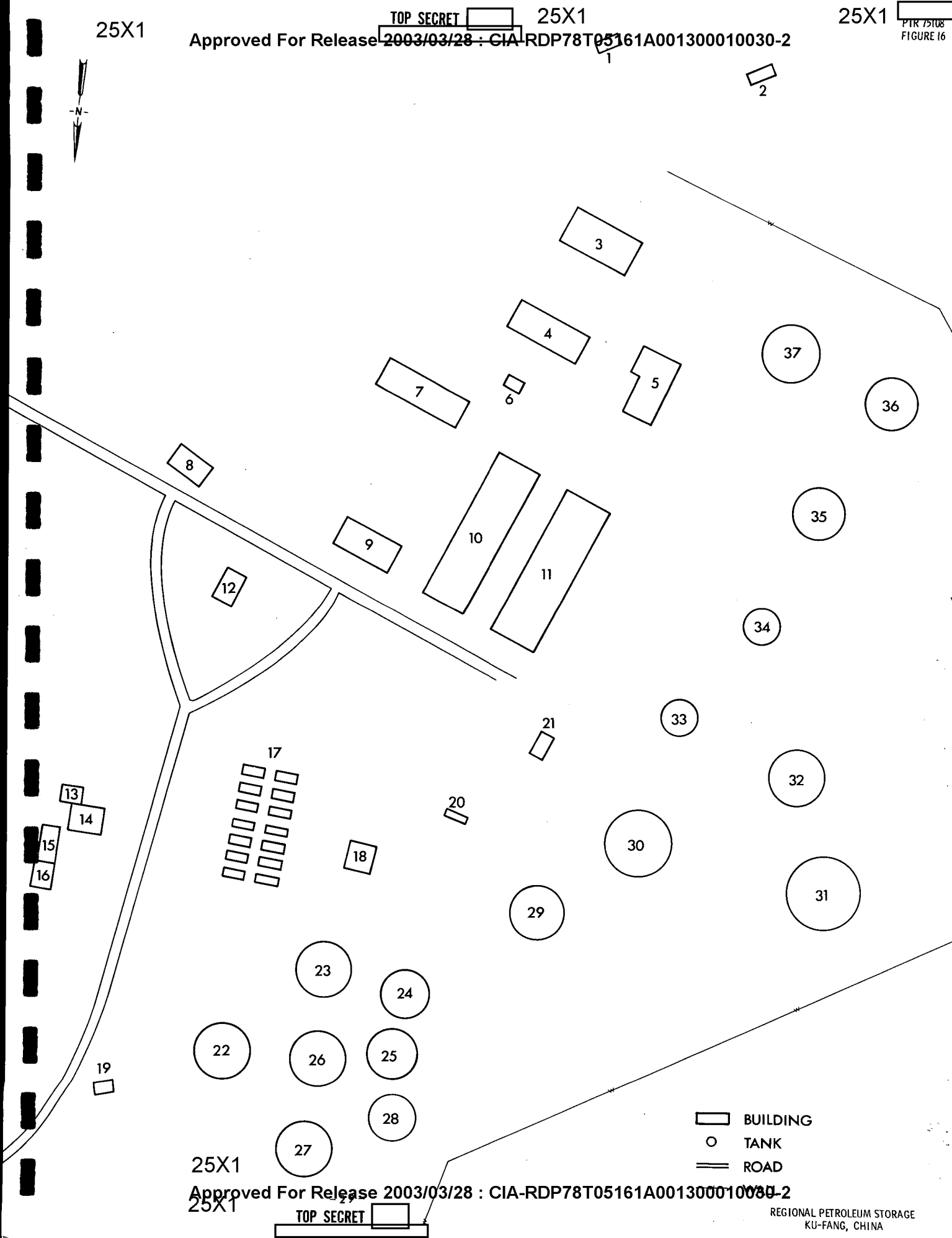
TOP SECRET

25X1

25X1

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FIGURE 16

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25X1

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25X1

TOP SECRET

REGIONAL PETROLEUM STORAGE
KU-FANG, CHINA

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FIGURE 17

25X1

KU-FANG REGIONAL PETROLEUM STORAGE
KU-FANG, CHINA
25X1 29 03N - 119 13E 25X1

25X1

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TOP SECRET

25X1

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DDI IMAGERY ANALYSIS STAFF

25X1

REQUIREMENT

C-RR6-84,129

CIA/IAS PROJECT

30529-7

25X1

- 31 -

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TOP SECRET

25X1

TOP SECRET

TOP SECRET